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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,438	01/26/2006	Sylvain Faure	355901-0108	5915

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EXAMINER	
WEBB, GREGORY E	

ART UNIT	PAPER NUMBER
1796	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,438	FAURE ET AL.	
	Examiner	Art Unit	
	Gregory E. Webb	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *change of address on 10/18/07*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

12/19/07

DETAILED ACTION

1. Claims 1-17 provides for the use of foam, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-17 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Applicant's claim 1 recites a process of using a foam. However, the applicant's process does not contain an active step such as "applying the foam to a radioactive contaminant." Although the applicant's claim contains the active verb "prepared" this is not a step in the process as it is in past-tense and would be performed prior to the instant process.

2. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "inorganic acid" is used in claim 1. However in claim 6 the applicant states that oxalic acid is a preferred embodiment of the inorganic acid. Oxalic acid is a carboxylic acid and would never be considered an inorganic acid or an inorganic base. As such claim 1 is inconsistent with the term "oxalic acid."

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-14, and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Fournel et al (US 6,561,200).

5. Fournel teaches a foam generating process for circulation in an installation. Fournel teaches the specific use in radioactive decontamination (see col. 6, lines 25-30).

6. Fournel further teaches example compositions including those containing amphoteric betaine surfactants, saccharide surfactants, sulfuric acid; thickening agents, hydroxides, and destabilizing agents (see col. 4).

7. Fournel further teaches the use of sulfobetaines as a suitable surfactant (see col. 4, lines 44-68).

8. Fournel teaches specific viscosing agents including polyethylene glycol with a molecular weight of 6000 (see col. 3, lines 33-41).

9. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Dingus et al (US 5,670,469).

10. Dingus teaches deconmination composition. Dingus teaches the use on radioactive contaminants (see cols. 6-7).

11. Dingus teaches the use of various surfactants including betaine and thickeners including polymers and saccharides such as carboxymethyl cellulose.

12. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Gauchon (US6475296).

13. Concerning the foam, Gauchon teaches the following:
This composition is appropriate, for example, for generating **foam** from a **foam** generator comprising a porous packing. This **foam** generator can, for example, be composed of a cylinder 120 mm long and 8 mm in diameter filled with 3.24 g of a packing of the FORAFLON (Trademark) type. The **foam** can be generated for example with a flow rate of a solution of this composition ranging from about 23 to about 28 l/hr, and a gas flow rate, for example air, of about 88 l/hr in normal conditions of temperature and pressure. The **foam** can be generated easily in this example with a flow rate ranging from about 120 to about 130 l/hr. This **foam** can have an expansion, that is a ratio between the volume of **foam** generated and the volume of interstitial liquid, ranging from about 6 to about 7. This **foam** is suitable, for example, for dissolving easily 1.2 g/l of TBP and its derivatives. (*emphasis added*)

14. Concerning the radioactive and the radioactive decontamination, Gauchon teaches the following:
The invention also provides an efficient means for preparing a surface for **radioactive** decontamination. In fact, in the reprocessing plants for irradiated nuclear fuels, certain derivatives of TBP, such as HDBP, form precipitates with most of the **radioactive** metal cations present inside these installations. These precipitates settle on the surfaces of these installations in the form of colloids, and **radioactive** decontamination of these surfaces requires their erosion over a thickness of 2 to 10 .mu.m. This erosion can only be efficient after elimination of the greasy solvents on these surfaces, in particular the colloids of TBP and derivatives of the latter, that is to say after efficient degreasing of these surfaces. (*emphasis added*)

15. Concerning the decontamination, Gauchon teaches the following:
After this radioactive **decontamination** treatment, the loss in weight .DELTA.m due to the erosive treatment and the residual activity .sup.106 Ru (AR2) of each surface degreased and **decontaminate**d were measured. From this latter measurement, a total **decontamination** factor FDT=A.sub.0 /AR2 was determined for each surface. The FDT

decontamination factor is that obtained for degreasing and **decontamination** of each surface. (*emphasis added*)

16. Concerning the hydrochloric acid, Gauchon teaches the following:
The HF erosive treatment consists of treating a surface by putting this surface into contact with a treatment solution comprising a mixture of concentrated **nitric acid** and HF, for a length of time and at a temperature such that the erosion of this surface acts on a thickness of 2 to 10 .mu.m. The concentration of **nitric acid** can, for example, be 2 mol.l.sup.-1 and that of HF of 0.1 mol.l.sup.-1. The treatment may, for example, last for 5.5 hours, at a temperature of 50.degree. C. for example, and may comprise agitation of the treatment solution. This treatment is intended to complex certain radionuclides such as Pu, Zr, U, Am and to displace the fixed contamination on the surface. (*emphasis added*)

17. Concerning the xanthan gum, Gauchon teaches the following:
In a third variant of this embodiment, the composition is used in the form of a gel. According to this third variant, the composition according to the invention can comprise for example about 0.05 to about 1% by weight or again about 0.05 to about 0.4% by weight of ether of oleic alcohol and ethylene polyoxide, from about 0.025 to about 0.4% by weight of block copolymer, a foam inhibitor and a viscosity agent. The viscosity agent can be **xanthan gum**. This viscosity agent can be added in a quantity making it possible to obtain a gel with a viscosity, for example, of about 0.8 Pa.s (800 cps). When the viscosity agent is **xanthan gum**, it can be added, for example, at a concentration of about 1.2% by weight. According to this third variant, it can be advantageous to use a little foaming or low foaming composition such as those described in the first variant of this embodiment of the present invention, that is to say comprising a foam inhibitor. (*emphasis added*)

18. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Grawe (US5421897).

19. Concerning the foam, Grawe teaches the following:
To aid in lifting the contaminant from the surface and to promote its inclusion into the liquid-state composition, aerosol can packaging may be used with the inclusion of **foam** enhancement agents. Examples of these agents include: chlorofluorocarbons such as chlorodifluoromethane, chlorotetrafluoroethane, dichlorotetrafluoroethane, trichlorofluoromethane, and trichlorotrifluoroethane; ethers such as dimethyl ether; fluorocarbons such as perfluoropentane; halocarbons such as ethyl chloride; hydrocarbons such as butane, isobutane, pentane and propane. (*emphasis added*)

20. Concerning the radioactive, Grawe teaches the following:
One ml of sodium pertechnetate Tc 99m eluate was pipetted onto a 6.times.6 inch porcelain tile surface fitted with a 3/16 inch raised border. The eluate was dispersed over the surface using a Chemware teflon policeman and evaporated to dryness with infrared heating. The **radiation** level of the tile surface was measured using a 2-1/4.times.2-1/4 sodium iodide detector and EGG Ortec 925 amplifier, and the net **radiation** level measured 5470 counts. Approximately 1 ml of coating 2 was misted over the surface, and, after a 5 minute reaction period, 40-45 wet mils of coating 1 was sprayed over coating 2. The cleaning process was aided by manually scrubbing the coatings with a nylon dental brush. After 2 minutes of scrubbing, the liquid-state composition was redistributed evenly over the surface, and approximately 6 ml of the chemical drying agent was spray applied. After 30 minutes, the solid-state matrix was easily peeled from the porcelain surface. The **radiation** level was measured again, and was found to have dropped to 446 counts. (*emphasis added*)

21. Concerning the decontamination, Grawe teaches the following:
Thus, one aspect of the present invention provides a process for removing a contaminant from a surface. In the first step of this process, a liquid-state composition is applied to a surface comprising a contaminant. In the second step, the liquid-state composition is allowed to solidify into a solid-state matrix which sequesters the contaminant. Finally, the solid-state matrix is removed from the surface, thereby **decontaminating** the surface. (*emphasis added*)

22. Concerning the nonionic surfactant, Grawe teaches the following:
Preferred amounts of dispersant range from about 0.01 to about 5%, based on the total weight of the liquid-state composition. Examples of dispersants include: Alkasperse DM-5 and Alkasperse M-5, anionic copolymer sodiumsalts; AMP-95, a 2-amino-2-methyl-1-propanol; Byk 156, an ammonium salt of an acrylic acid copolymer; Emcol K-8300, a half ester disodium sulfosuccinate derived from an alkanolamide; Surfynol 61, a 3,5-dimethyl-1-hexyn-3-ol; Surfynol GA, a blend of **nonionic surfactants**; Witcamide 5130, a modified alkanolamide; Witcolate D-510, a sodium 2-ethylhexyl sulfate; Witconate 79S, an amine alkylaryl sulfonate; Witconol NP-100, an alkylaryl polyether alcohol; Witconol RDC-D, a diglycol coconate. (*emphasis added*)
Concerning the hydrochloric acid, Grawe teaches the following:
Chlorauric acid, n-ethyl-o-hydroxytetrahydroquinoline with **hydrochloric acid**, silver nitrate with dilute **sulfuric acid** and stannous chloride with **hydrochloric acid**. (*emphasis added*)

23. Concerning the rheological, Grawe teaches the following:
The polymeric component of the composition plays an important role in both the liquid and the solid states. In the liquid state, the polymeric component affects the **rheological** properties of the liquid-state composition, and thus its ability to penetrate inaccessible

surface areas where contaminant may be hidden, by altering internal surface area, interfacial free energy, interfacial friction and medium viscosity. Furthermore, the polymeric component's surface active properties, interaction abilities, associative forces and sorption propensities help break surface/contaminant bonds and lift the contaminant from the surface and carry it into the liquid-state composition. (*emphasis added*)

24. Concerning the cellulose and the xanthan gum, Grawe teaches the following: Examples of these agents include attapulgite clays, such as Attagel 50; hydroxyethyl **cellulose**, such as Cellosize QP-300 and Cellosize QP-4400; modified hydroxyethyl cellulosics, such as Natrosol Plus grade 330 associative cellulosic polymer; modified clays, such as Bentone LT and Bentone EW; poly (acrylic acid) systems, such as Acrysol TT-615 and Acrysol GS; polyether polyurethane associatives, such as Rheolate 255 and Rheolate 278, and proteins such as casein, water soluble polysaccharides and **xanthan gum** and guar. (*emphasis added*)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 571-272-1325. The examiner can normally be reached on 9:00-17:30 (m-f).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/19/07

Gregory E. Webb
Primary Examiner
Art Unit 1796

gew